



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**REGION III**  
**1650 Arch Street**  
**Philadelphia, Pennsylvania 19103-2029**

**DATE:** 09/23/2010

**SUBJECT:** Range Resources, October 6, 2009

**FROM:** Paula Curtin *PCurtin*  
Spill Enforcement Coordinator (3HS61)

**THRU:** Joan Armstrong, Chief *JA*  
Oil and Prevention Branch (3HS61)

**THRU:** Karen Melvin, Associate Division Director *KMelvin*  
Office of Enforcement (3HS60)

**TO:** File

On June 11, 2010, an Information Request letter pursuant to Section 308 of the Clean Water Act was issued to Range Resources. The request was sent as a result of an October 6, 2009 incident at the Kerns Unit Well in Hopewell Township, Washington County, PA that was reported in the media. EPA received a response from Range Resources on August 27, 2010.

According to the response, on October 6, 2009, Red Oak Water Transfer was pumping diluted flowback water from Range Resources' Bednarski Impoundment to the Kearns frac. The water was being conveyed through a 6 mile long run of 8 inch diameter PVC pipe. According to the report, the pipe was hydrostatically pressure tested prior to pumping the diluted flowback water. The straight sections of pipe were connected with couplers specifically for this type of pipe to prevent leaks; however, connections such as elbows were glued.

On October 6, 2009, while transferring water, an employee discovered that they had lost pressure in the line and immediately turned the pumps off. According to the report, the line had ruptured at the 90 degree elbow connection. The company estimated that approximately 250 barrels of diluted flowback water had spilled onto the ground. At the location of the elbow, the piping was laying in an unnamed tributary to Brush Run. According to reports, it was later determined the elbow coupling was defective.

A vacuum truck was used to clean out 500 gallons of the spilled water that was contained in low areas of the tributary. The area was also flushed with 1,200 gallons of fresh water.

On October 7, 2009, PADEP identified a loss of approximately 200-300 minnows. In May of 2010, PA DEP finalized an order with Range Resources. As part of the order, Range Resources agreed to pay a civil a penalty of \$141,175 for the incident. Range was cited for the following



violations: Discharging flowback water into waters of Commonwealth; Improper disposal of fluids; Failure to control and/or store flowback water properly; and Failure to immediately report the release.

According to the company, the flowback water contained no oil. According to the company, frac water typically utilized by Range consists of approximately 94% water and 5% sand. Other additives include Ethylene Glycol, alcohol and sodium hydroxide (.01%); Glutaraldehyde, ethanol and methanol (.06%); Polyacrylamide (.05%), and Hydrochloric Acid (.03%). Range Resources contends that, given the dilution factors in the fluids, none of the components in the fracturing fluid exceeded reportable quantity thresholds of any chemicals listed under 40 C.F.R. Section 117.3. And in fact, the only chemical component in the frac fluid (submitted by the company) listed under 40 C.F.R. Section 117.3 is Hydrochloric Acid which has an RQ of 5,000 lbs. If the reported discharge to Brush Run was, in fact, only 250 barrels of flowback fluid, the volume of HCL discharged would have been approximately 3 gallons or 25 pounds, so it does not appear that the quantity of HCL in the fluid was above the RQ.

Based on my review of the documentation received from Range Resources and in light of the enforcement action taken by PADEP, the EPA enforcement under CWA Section 311(b) would be redundant.

There is no NPDES or state wastewater discharge permit associated with this site.

Based on current information available, there is no further action under 311(b)(3) being contemplated at this time. EPA reserves the right to conduct future investigations, and bring future enforcement actions, as appropriate.

The following documents were furnished by Range Resources as attachments to the Information Request.

- 1) Erosion and Sediment Control Management Plan.
- 2) PPC Plan.

